

## **PATHS (Promoting Alternative THinking Strategies)**

Brief Description | Recognition | Program IOM | Intervention Type | Content Focus | Protective Factors  
Risk Factors | Interventions by Domain | Key Program Approaches | Outcomes | Evaluation Design  
Delivery Specifications | Intended Setting | Fidelity | Barriers and Problems | Personnel | Education  
Personnel Training | Cost | Intended Age Group | Intended Population | Gender Focus  
Replication Information | Contact Information

*Program developers or their agents provided the Model Program information below.*

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### **BRIEF DESCRIPTION**

PATHS curriculum is a program for educators and counselors working with elementary school aged children (5 to 12 years of age) to facilitate the development of self-control, emotional awareness, and interpersonal problem-solving skills. It seeks to reduce aggression and behavior problems while simultaneously enhancing emotional development and the educational process in the classroom.

### **PROGRAM BACKGROUND**

PATHS is based on the Affective-Behavioral-Cognitive-Dynamic (ABCD) Model of Development, which posits that to fully understand one's own behaviors, those of another person, or interpersonal interactions, it is necessary to take emotions, thoughts, and communication skills into account. PATHS also emphasizes development of the following attributes:

- Self-esteem and self-confidence
- Self-control
- Frustration tolerance
- Anger management
- Locus of control/personal responsibility
- Attention and concentration
- Reflectivity vs. impulsivity
- Emotional understanding
- Identification, internalization, and guilt
- Feelings vs. behaviors (all feelings are okay, some behaviors are not okay)
- Emotions as a form of communication



## **RECOGNITION**

Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services: Model Program

Blueprints for Violence Prevention: Model Program

Safe, Disciplined and Drug-Free Schools (U.S. Department of Education): Promising Program

Department of Health and Human Services: Positive Youth Development

Centers for Disease Control and Prevention, U.S. Department of Health and Human Services: Best Practices in Youth Violence Prevention

U.S. Surgeon General's Report on Youth Violence: Promising Program

Collaborative for Academic, Social and Emotional Learning (CASEL): Select Program

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## **INSTITUTE OF MEDICINE CLASSIFICATION (IOM)**

UNIVERSAL, SELECTIVE

Can be used with universal or selective audiences. It is developed for use both in general education classrooms and with special education students. PATHS has also been used extensively with deaf and hard-of-hearing students.

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## **INTERVENTION TYPE**

SCHOOL-BASED

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## **CONTENT FOCUS**

ANTISOCIAL/AGGRESSIVE BEHAVIOR, SOCIAL AND EMOTIONAL COMPETENCE,  
DOES NOT SPECIFICALLY ADDRESS ANY SUBSTANCES

This program addresses risk factors that lead to later substance use or abuse, such as conduct problems, depression, conflict resolution, frustration, and self-control.

**Parent involvement as an adjunct strategy:**

The program provides parent letters, handouts, and home activities to keep parents informed and involved.

## **PROTECTIVE FACTORS**

INDIVIDUAL, PEER, FAMILY, SCHOOL

### **INDIVIDUAL**

- Emotional understanding
- Self-control
- Empathy development
- Emotion regulation
- Problem-solving skills
- Communication skills
- Cognitive and academic skills

### **PEER**

- Positive peer relations

### **FAMILY**

- Family communication skills

### **SCHOOL**

- Positive classroom atmosphere
  - Teacher management
  - Teacher-student relations
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## **RISK FACTORS**

INDIVIDUAL, PEER, SCHOOL

### **INDIVIDUAL**

- Impulsivity
- Aggression
- Internalizing problems (depression and anxiety)

### **PEER**

- Poor peer relations

### **SCHOOL**

- Disruptive classroom behavior
- Chaotic classroom environment

## **INTERVENTIONS BY DOMAIN**

### **INDIVIDUAL, FAMILY, SCHOOL**

#### **INDIVIDUAL**

- Life/social skills training

#### **FAMILY**

- Task-oriented family education sessions to improve family interactions (e.g., parent involvement in program homework assignments, etc.)

#### **SCHOOL**

- Classroom-based skills development
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## **KEY PROGRAM APPROACHES**

### **IN-SCHOOL CURRICULA, SKILL DEVELOPMENT**

#### **IN-SCHOOL CURRICULA**

The PATHS curriculum has three units. In addition, there is a supplementary volume that provides optional lessons, review, and topics on teasing, friendship, informal problem-solving meetings, and fair/unfair treatment.

Unit One on self-control is a series of structured lessons that use a story of a young turtle that learns to develop better self-control. It is not necessary for all children, but with those who have significant language or cognitive delays or in small classes of children with severe behavior problems. This unit is also recommended for young children in kindergarten and first grade.

Unit Two on feelings and relationships consists of lessons that relate to emotional and interpersonal understanding, as well as anger management.

Unit Three on interpersonal cognitive problem solving teaches interpersonal problem solving.

#### **SKILL DEVELOPMENT**

The curriculum provides teachers with systematic and developmentally based lessons, materials, and instructions for teaching students emotional literacy, self-control, social competence, positive peer relations, and interpersonal problem-solving skills.

#### **Describe typical problems that users experience in implementing these program strategies and potential solutions:**

None. Children typically enjoy PATHS and participate willingly. Their biggest complaint is that "there isn't enough time."

## HOW IT WORKS

The PATHS curriculum provides teachers with systematic and developmentally based lessons, materials, and instructions for teaching their students emotional literacy, self-control, social competence, positive peer relations, and interpersonal problem-solving skills. The PATHS curriculum is contained in six volumes that cover four conceptual units:

- **Readiness and Self-Control "Turtle" Unit** (1 volume)—promotes the development of self-control and the ability to identify problems.
- **Feelings and Relationships Unit** (3 volumes)—teaches students to recognize a wide variety of affective states; promotes empathy.
- **Problem Solving Unit** (1 volume)—teaches students to follow a series of steps to find solutions to problems.
- **Supplementary Lessons** (1 volume)—contains optional lessons, review, and extensions; topics include teasing and fair/unfair treatment. PATHS is designed to be taught by regular classroom teachers, integrated into the regular curriculum. However, it is important to ensure that children generalize (i.e., apply the skills to new contexts) and use the PATHS skills throughout the school day and in other contexts. Generalization activities and strategies are provided both for teachers and for parents.

PATHS is implemented by classroom teachers in kindergarten through sixth grade, with entire classrooms using a 131-lesson curriculum throughout the elementary school years. Lessons should be taught three to five times per week, although timing and frequency of the sessions can be adapted to suit individual classroom needs. Parent letters, handouts, and home activities are included to keep parents informed and involved. The PATHS curriculum includes comprehensive materials and training that cover each year/grade level of the program's implementation. Materials include:

### Basic PATHS Kit (Grades 1–6)

- Instructor's manual
- Five curriculum manuals
- Set of "feelings" photographs
- Set of "feelings" face cards
- Two wall charts
- Four full-color posters

### Turtle Unit (Kindergarten)

- Instructor's manual
- Curriculum manual
- Turtle puppet with pad
- Turtle stamp
- Poster

Teacher training and technical assistance are available onsite to ensure effective implementation of the program.

## **OUTCOMES**

REDUCTIONS IN BEHAVIORS RELATED TO RISK FACTORS, IMPROVEMENTS IN BEHAVIORS RELATED TO PROTECTIVE FACTORS, OTHER TYPES OF OUTCOMES

### **REDUCTIONS IN BEHAVIORS RELATED TO RISK FACTORS**

32% reduction in teachers' reports of students exhibiting aggressive behavior

Significant improvement in students' ability to tolerate frustration

Significant improvement in students' ability and willingness to use effective conflict-resolution strategies

### **IMPROVEMENTS IN BEHAVIORS RELATED TO PROTECTIVE FACTORS**

Children show improvements in protective factors, including social competence, social problem-solving skills, emotional understanding, and some cognitive skills. In addition, there are observed improvements in the quality of the classroom atmosphere.

36% increase in teachers' reports of students exhibiting self-control

### **OTHER TYPES OF OUTCOMES**

Key outcomes are reductions in teacher ratings and self-ratings of students for both conduct problems and internalizing problems (depression and anxiety).

68% increase in students' vocabulary for and identification of emotions

20% increase in students' scores on cognitive skills test

### **Benefits**

Compared to control youth, PATHS youth showed:

- Improved understanding and recognition of emotions
- Improved thinking and planning skills
- Decreased anxiety/depressive symptoms (teacher report of special-needs students)
- Decreased conduct problems (teacher report of special-needs students)
- Decreased symptoms of sadness and depression (child report—special needs)

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## **EVALUATION DESIGN**

There have been three controlled studies of PATHS, with randomized control groups, conducted between 1983 and 1995 involving— (1) Typical children (sample size=236, grades 2 and 3, 42 percent ethnic minority students in an urban school district); (2) Children with special needs (sample size=126, grades 1 through 4, special needs classrooms, 35 percent ethnic minority, in three urban and suburban school districts); and (3) Deaf/hearing-impaired children (sample size=57, grades 1 through 3, 17 percent ethnic minority students in four urban and suburban school districts).

## **DELIVERY SPECIFICATIONS**

### **3–6 YEARS**

Amount of time required to deliver the program to obtain documented outcomes:

Lessons should be taught three to five times a week (or more, if desired) throughout the elementary school years.

Class sessions usually last between 20 and 30 minutes, depending on the grade level and classroom composition.

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## **INTENDED SETTING**

### **RURAL, URBAN, SUBURBAN**

PATHS was originally developed for and tested with urban populations. It has now been used with success in urban, suburban, and rural settings.

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## **FIDELITY**

Components that must be included in order to achieve the same outcomes cited by the developer:

Teachers should receive a 2-day training before implementation.

There is a need for district or school-based administrative support for the program.

The program should be implemented with entire classrooms.

It should use the 131-lesson curriculum throughout the elementary school years, K–6.

Lessons should occur three to five times a week (or more, if desired).

An onsite coordinator should provide at least 1 hour of support time each week per classroom in the first year of implementation.

**Optional components or strategies and how they were determined to be optional.**

The number of lessons per week can be adapted to suit individual classroom needs.

The Turtle Unit may not be required for all children.

## **BARRIERS AND PROBLEMS**

Teachers are sometimes concerned that using PATHS will take away from academic time. It should be noted that in all clinical trials, PATHS students showed no decrease in reading or math achievement scores as compared to nonintervention control classes. On the contrary, there were some findings of significant cognitive improvements with students who received PATHS.

Similarly, teachers sometimes report difficulty with fitting a new topic into their already crowded classroom schedules. However, when they actually begin using PATHS, most teachers report spending far less time with discipline issues, which made up for much of the scheduled time taken up by the lessons.

In addition, academics are embedded in the lessons themselves (e.g., reading stories and practicing spelling), and generalization strategies for integrating PATHS with other classroom subjects are also included in the curriculum. Finally, the first years of implementation of PATHS with older children require instruction in the basic foundation of PATHS, as they will not have received previous instruction in social-emotional learning. More advanced instruction is possible after the children have been taught the basic material (e.g., after PATHS has been taught for one or more years).

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## **PERSONNEL**

### **FULL TIME, PART TIME, PAID**

There are no specific requirements for teachers, except willingness to implement PATHS. An interest and background in children's social and emotional development are helpful but not necessary.

### **Typical personnel problems encountered by users when implementing this Model Program and potential solutions:**

**Problem:** Like any new curriculum, there is a learning curve with PATHS, so teaching the program is easier after the first year.

**Solution:** Optional training workshops are highly recommended when first implementing PATHS, along with strong support for the program from school administrators. Program continuity and fidelity are more likely when a stable and supportive principal is present.

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## **EDUCATION**

### **UNDERGRADUATE**

Classroom teachers and school administrators.



## **PERSONNEL TRAINING**

Type: SEMINAR/WORKSHOP, Location: ONSITE (user)/OFFSITE (e-mail and phone TA)

Length: BASIC/REFRESHER (midyear booster)

There are two levels of training and consultation that are offered: the training and consultation package, which replicates the conditions under which PATHS was tested in research trials, and a less complete basic training package.

### **Sequence for Complete Training and Ongoing Technical Assistance**

1. Initial consultation with PATHS Training LLC during the planning (or grant-writing phase)
2. Two-day training in Year One for teachers (onsite)
3. Ongoing phone or e-mail consultation between onsite consultant and PATHS trainer
4. Midyear booster visit to site
5. Refresher training on an as-needed basis with experienced teachers in Year Two

### **Sequence for Basic Training**

1. Initial consultation with PATHS Training LLC during the planning (or grant-writing phase)
2. Two-day training in Year One for teachers (onsite)

### **Trainer Certification Program**

In 2000, PATHS LLC initiated a process of certifying PATHS trainers. Certification requires serving as a local PATHS coordinator for at least a 2-year period and showing exemplary skills in working with teachers as well as providing leadership in effectively implementing PATHS in a local setting. The second stage of certification includes intensive training in presentation of PATHS as well as further training and supervision in the process of school-based consultation. Currently, the PATHS Training LLC has approximately 15 trainers throughout the United States.

Teacher training and technical assistance are available onsite to ensure effective implementation of the program

## **COST (estimated in U.S. dollars)**

\$10,000+

### **Cost considerations for implementing this program as recommended by the developer:**

Total cost estimates, including complete training and ongoing technical assistance, depend on how existing support staff (e.g., counselors, head teachers) is utilized in the program. If a counselor is used in the role of curriculum consultant (at least a .5 FTE), curriculum and training costs for the first year of operation for an elementary school would be approximately \$12,000, or \$25 per student. Costs in later years would be substantially reduced to about \$10 per student, given the expectation of low to moderate staff turnover. Thus, the cost over a 3-year period would be approximately \$15 per student. All other personnel for the project (teachers) are already working and are paid by school district funds. These cost estimates include the cost of purchasing the curriculum (\$679 for the entire curriculum, including the Readiness Unit).

### **MATERIALS**

Complete PATHS curriculum . . . . . \$679

PATHS Basic Kit . . . . . \$579

PATHS Readiness and Self-Control "Turtle Unit" . . . . . \$159

The PATHS Basic Kit (one per classroom recommended) includes Volumes 1 through 5, the Instructor's Manual, Feelings Face Cards, Feeling Charts, Feelings Photographs, and four classroom posters.

The Readiness Unit (recommended for each kindergarten and first grade classroom) includes the Readiness Lesson Volume, the Instructor's Manual, Turtle puppet, and Turtle stamp and pad.

The Complete PATHS Kit includes all of the above . . . . . \$679

Per classroom, costs of additional materials are estimated at \$100 per year.

### **TRAINING**

Complete Training and Ongoing Technical Assistance,

Onsite (2 days for up to 30 participants plus booster

and ongoing consultation) . . . . . \$4,000–\$5,000  
plus travel and per diem  
expenses for trainer

Basic Training, onsite (2 days for up to 30 participants) . . . . . \$3,000 plus travel and per  
diem expenses for trainer

### **Typical cost issues encountered by users when implementing this Model Program and potential solutions:**

School districts often cover the costs of implementation from Safe and Drug Free Schools Funds, Title I, and other State-related funds for student improvement and drug and violence prevention. In some cases, schools link with mental health and drug abuse service providers and access funds through community-based mental health and drug prevention sources.

## **INTENDED AGE GROUP**

CHILDHOOD (5–11), EARLY ADOLESCENT (12–14)

PATHS was developed for use in kindergarten through sixth grades.

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## **INTENDED POPULATION**

AFRICAN AMERICAN, ASIAN AMERICAN, HISPANIC/LATINO,  
AMERICAN INDIAN/ALASKA NATIVE, WHITE

PATHS has been delivered to a diverse set of populations in both the United States and other countries. Research has indicated equal effectiveness in ethnic minority and White populations. It has been translated into Spanish, Dutch, and French.

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## **GENDER FOCUS**

BOTH GENDERS

PATHS was developed for use with both male and female children.

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## **REPLICATION AND ADAPTATION INFORMATION**

Contact Channing Bete Company to obtain references to appropriate schools and providers to gain their perspectives and experiences in implementing PATHS.

Additional information can be obtained at the following Web sites:

[www.colorado.edu/cspv/blueprints/model/ten\\_paths.htm](http://www.colorado.edu/cspv/blueprints/model/ten_paths.htm)

[www.prevention.psu.edu/PATHS/](http://www.prevention.psu.edu/PATHS/)

[http://www.ed.gov/offices/OERI/ORAD/KAD/expert\\_panel/2001promising\\_sdfs.html](http://www.ed.gov/offices/OERI/ORAD/KAD/expert_panel/2001promising_sdfs.html)

[www.aspa.org/tap/33-1path.htm#beginning](http://www.aspa.org/tap/33-1path.htm#beginning)

PATHS sites include Harrisburg, Erie, Wilkes-Barre, Laredo, Phoenix, Bridgeport, and a variety of other urban and rural sites in Pennsylvania, Texas, Arizona, New Mexico, Idaho, Ohio, Illinois, Missouri, Connecticut, Maryland, New Jersey, Virginia, West Virginia, Oklahoma, Wyoming, Alabama, Tennessee, Louisiana, Florida, Kansas, Washington, and California.

PATHS has been implemented in schools throughout the United States and in England, Wales, Scotland, The Netherlands, and Australia.

## **ADAPTATIONS**

### **AFTER-CARE PATHS**

The model has also been adapted for use in after-school programs in Pennsylvania, West Virginia, Washington, Ohio, Kansas, and New York. The After-Care PATHS model includes weekly themes, each involving one group lesson with additional activities for staff to implement throughout the week. It is appropriate for use with children in kindergarten through grade six. There have been no clinical trials with control groups. However, providers report decreased behavior problems, increased emotional understanding, enhanced peer relationships, and improved after-care atmosphere. Parents are invited to observe PATHS sessions and are provided parent letters and informational sheets. This version of PATHS is now in the planning stages for publication.

### **PRESCHOOL PATHS**

Preschool PATHS has been successfully used in Head Start programs in Pennsylvania and is appropriate for use with children 3 to 5 years of age. Lessons are taught by teachers at circle time and then followed up with center-based extension activities using art, music, language arts, etc. Generalization strategies are ongoing to augment lessons and center-based activities. Key themes include following rules, group cohesion, basic emotional literacy, self-control, anger management, and basic problem solving. It has been tested with a randomized trial design in two sites in Pennsylvania. Research showed significant improvements at posttest on teacher and parent reports of social competence, teachers' reports of internalizing problems, and students' understanding of emotions. Parent letters, informational sheets, and home activities are provided to promote parent involvement. This version of PATHS is now in the planning stages for publication.

#### **Changes in personnel capacity, qualifications, or training required for the adaptation:**

For After-Care PATHS, community consultants or provider staff can implement lessons and childcare staff implements activities.

For Preschool PATHS, regular teaching staff implements lessons.

#### **Additional racial/ethnic populations with which the adaptation has been implemented:**

After-Care PATHS has been successfully used with diverse racial and ethnic populations, including White, African American, Asian American, and Hispanic/Latino.

Preschool PATHS has been successfully used with diverse racial and ethnic populations, including White, African American, and Hispanic/Latino populations.

#### **Changes in cost estimates incurred with implementations of the adaptation:**

Cost of After-Care PATHS and Preschool Paths.

## TRAINING MATERIALS

Not known, pending publication.

## TRAINING COSTS

Training onsite requires 2 days for up to 30 participants. Cost is \$3,000, plus trainer travel and per diem costs. Costs for staff salaries for time to attend workshop, refreshments (if desired), and copying of handouts are applicable.

## OTHER COSTS

Per site, additional materials costs are estimated at \$100 to \$200 per year.

### **Other features of the Model Program that were altered or affected by the adaptation:**

During adaptations, numerous revisions have been made to the original PATHS curriculum to strengthen its grade-by-grade sequence and provide greater linkages to language arts, reading, and social studies. A new grade-by-grade version of PATHS is in the planning stages.

After-Care PATHS can have high rates of provider turnover, which can make ongoing implementation difficult. Training for PATHS is recommended as part of staff training. Timing of group lessons needs planning, since parents pick up children at different times. Consulting parents in the planning stage can help with this.

No significant barriers have been encountered in the projects using Preschool PATHS thus far. However, strong administrative support and involvement are necessary to ensure a quality implementation.

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## CONTACT INFORMATION

### ABOUT THE DEVELOPERS

**Carol A. Kusché, Ph.D.**

**Mark T. Greenberg, Ph.D.**

Carol A. Kusché is a psychoanalyst and clinical psychologist in private practice in Seattle, where she also is a clinical associate professor at the University of Washington, department of psychology, and a faculty member at the Seattle Psychoanalytic Society and the Northwest Center for Psychoanalysis. Areas in which Dr. Kusché has conducted research include children's emotional, social, and cognitive development; deafness; and psychoanalytic neuropsychology.

Mark T. Greenberg, the author of more than 100 articles and chapters on child development and understanding aggression, violence, and externalizing disorders, is director of the Prevention Research Center for the Promotion of Human Development at Pennsylvania State University. Dr. Greenberg holds the Bennett Endowed Chair in prevention research at Penn State's College of Health and Human Services.

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